

# Sempra LNG Update

August 2009

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#### **LNG Overview**

- ► LNG import terminals
  - Energía Costa Azul in Northern Baja CA, Mexico
  - Cameron LNG in Hackberry, Louisiana
- ▶ Total send-out capacity of 2.5 Bcf/d
  - Energía Costa Azul: 1.0 Bcf/d
  - Cameron: 1.5 Bcf/d
- ► Roughly 65% of capacity under long-term contract
  - Energía Costa Azul: 100% contracted for 20 years
  - Cameron: 40% contracted for 20 years



### Energia Costa Azul Project Update

- North America's only West Coast LNG receipt facility
- ► In-service May 2008
- Capacity fully-contracted
  - 500 MMcf/d capacity contract with Shell/Gazprom (commenced Q2-08)
  - 500 MMcf/d supply contract with BP Tangguh project (contract in effect Q3-09)
- Nitrogen injection facilities in service by end of 2009



#### **Terminal Summary Data:**

Send-out capacity: 1.0 Bcf/d

Storage capacity: 6.9 Bcf

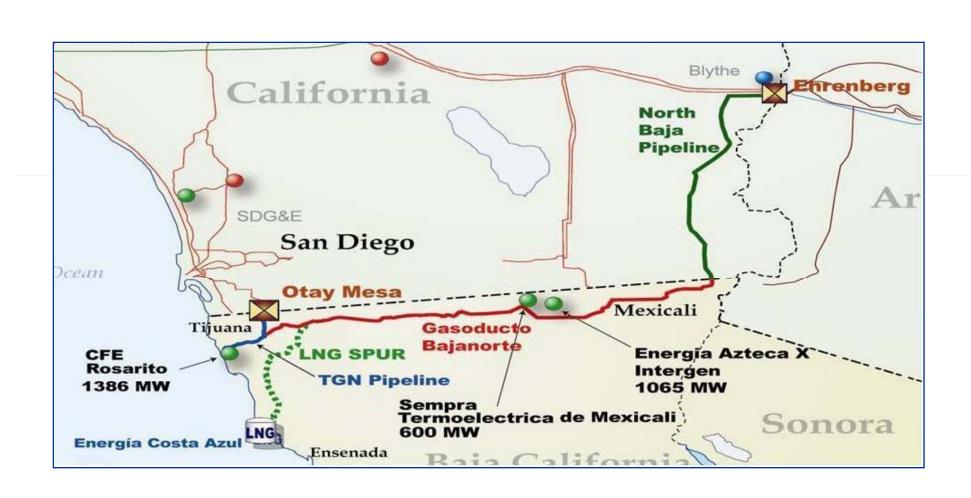
In-service date: May 2008

Capital cost: \$1.0 billion terminal

\$125 million nitrogen plant



## Pipelines Serving Northern Mexico





#### Costa Azul Terminal

- Access to regasified LNG from Costa Azul provides free insurance for California consumers
  - Costa Azul Terminal funded by Sempra LNG
  - Otay Mesa SDG&E receipt point construction and North Baja Pipeline expansion funded by natural gas shippers
  - Physical flows not subject to east of California demand
- Construction of all required pipeline infrastructure is completed and in service
  - Allows current delivery of regasified LNG to California
  - Thoroughly tested during Costa Azul commissioning in 3<sup>rd</sup> Qtr 2008
- ➤ Costa Azul Terminal will act in a similar manner to existing gas production basins in North America that currently supply California (San Juan, Rockies & Western Canada)
  - Market forces will determine the actual level of supply from each region
- Regasified LNG delivered from Costa Azul to consumers in Mexico will "increase" existing natural gas supply for delivery to California consumers
  - Sempra LNG has contractual commitments to CFE that are currently being supplied by natural gas delivered from the US





## Cameron Project Update

- Excellent market access
  - Connection to interstate pipeline network
  - Access to high-deliverability underground storage
  - Proximity to Henry Hub
- Commercial operations July 30
- Anchor contract with ENI
  - 20-year capacity contract for 600 MMcf/d



#### **Terminal Summary Data**:

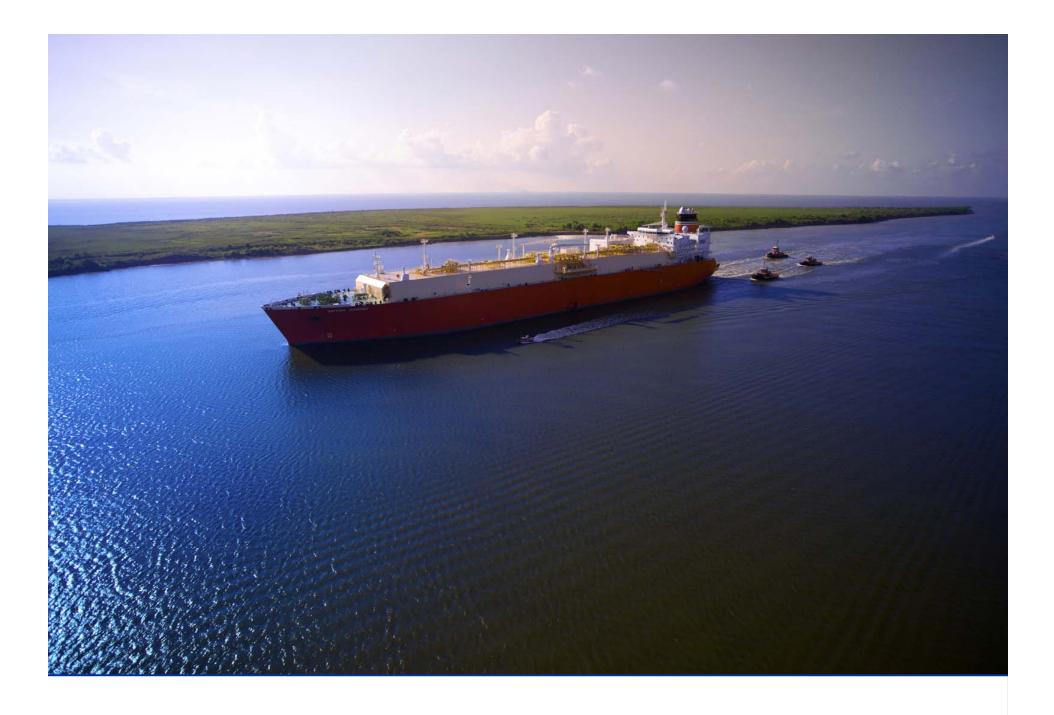
Send-out capacity: 1.5 Bcf/d

Storage capacity: 10.3 Bcf

In-service date: July 30, 2009

Capital cost: \$900 million terminal









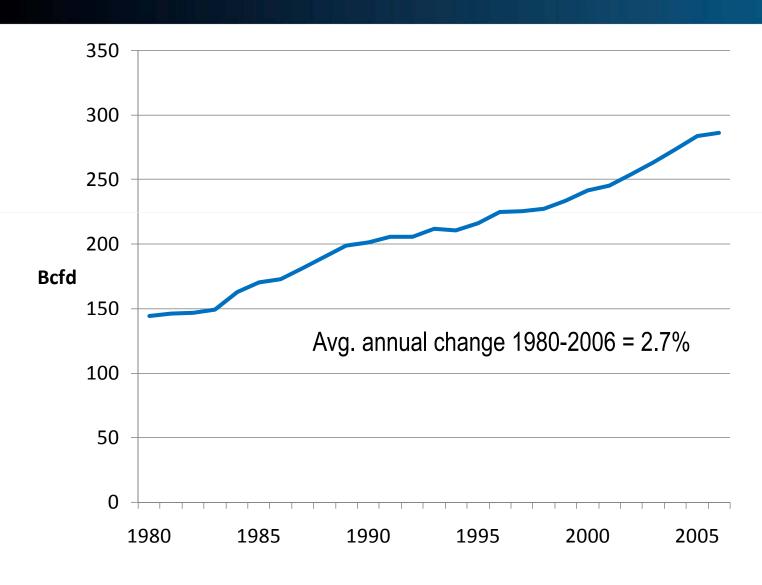


#### Global Gas Market

- ► LNG shortages have disappeared and prices in world regional markets are starting to synchronize.
  - World LNG supply capacity will increase by more than 30% over the 2009-2010 period,
    with the largest increase happening in the second half of 2009.
  - Meanwhile, the recession has caused world-wide OECD gas demand to fall 5.1% in the first 4 months of 2009.
  - Delivered spot LNG prices have fallen from a peak of nearly \$20 in 2008 to well under \$5 per MMBtu today, causing shipments to the US and UK to start to surge. The majority of cargoes to the US are expected to go to the East Coast where gas prices are higher.
- Market changes are opening new and interesting opportunities.
  - The move to a world market with indexed pricing may be accelerating, as marketers are now focused on the relationships of NYMEX, NBP, and Asia LNG spot prices.
  - The development of a world LNG market will enable increased arbitrage to quickly pull gas price differences around the world back in line.

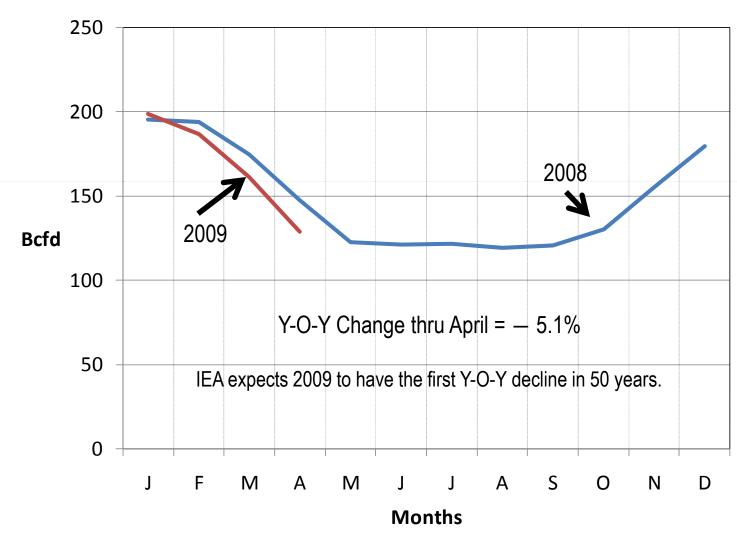


## World Gas Consumption





### World Gas Consumption: OECD Countries

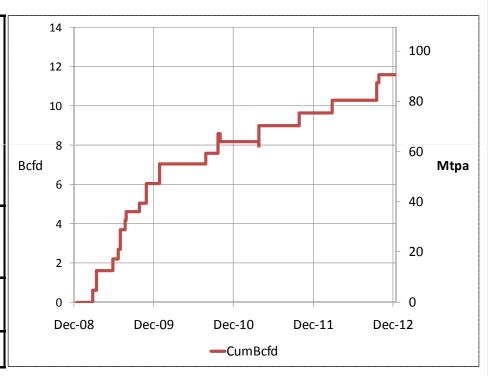


OECD: Organization for Economic Cooperation and Development



## Liquefaction Added: 2009-2012

<u>Liquefaction Terminal</u>	<u>Bcfd</u>	<u>Mtpa</u>	<u>Cum Bcf</u> d	Cum Mtpa	Start Date
Sakhalin II Train 1	0.61	4.8	0.61	4.8	Mar-09
Qatargas II Train 4	1.00	7.8	1.61	12.6	Apr-09
Sakhalin Train 2	0.61	4.8	2.22	17.3	Jun-09
Tangguh Train 1	0.49	3.8	2.71	21.2	Jul-09
Rasgas Train 6	1.00	7.8	3.71	29.0	Jul-09
Yemen Train 1	0.49	3.8	4.20	32.8	Aug-09
Tangguh Train 2	0.43	3.4	4.63	36.2	Sep-09
Yemen Train 2	0.43	3.4	5.06	39.5	Oct-09
Qatargas II Train 5	1.00	7.8	6.06	47.3	Nov-09
Rasgas Train 7	1.00	7.8	7.06	55.2	Jan-10
Peru	0.54	4.2	7.60	59.4	Aug-10
Qatargas 3 Train 6	1.00	7.8	8.60	67.2	Oct-10
Bontang Reduction	(0.40)	(3.1)	8.20	64.1	Oct-10
Alaska Shutdown	(0.19)	(1.5)	8.01	62.6	Apr-11
Qatargas 4 (Train 7)	1.00	7.8	9.01	70.4	Apr-11
Pluto Train 1	0.64	5.0	9.65	75.4	Oct-11
Angola Train 1	0.64	5.0	10.29	80.4	Mar-12
Browse Train 1	0.90	7.0	11.19	87.4	Oct-12



8/11/2009